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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,749	01/02/2002	Gregory A. Lyon	33778	2952
116	7590	06/06/2005	EXAMINER	
PEARNE & GORDON LLP 1801 EAST 9TH STREET SUITE 1200 CLEVELAND, OH 44114-3108			LEE, HWA S	
			ART UNIT	PAPER NUMBER
			2877	

DATE MAILED: 06/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/038,749

Applicant(s)

LYON, GREGORY A.

Examiner

Andrew Hwa S. Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Remarks

This Office Action is in response to Applicant's amendment of 3/17/05. By the amendment, claims 1, 5, 8, 12, and 18 have been amended. Claims 1 and 4-21 are now pending.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1 and 4-21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Farnsworth in view of Bissinger (US 5,470,165) and Poplawski et al (US 5,879,173).

Farnsworth shows a connector panel mount system comprising:

a connector receiving housing (12) having a plurality of surfaces for mounting to a receiving member (16) having first and second faces, the connector receiving housing having a cavity therein and one or more passages adjacent the cavity for receiving the fiber optic cable connector;

a protrusion (38 and/or 34)

on the connector receiving housing for engaging the first face of the receiving member; and

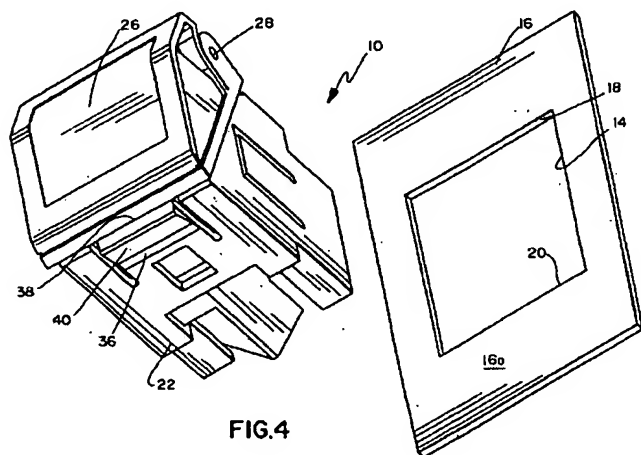


FIG.4

a lip (34) on the connector receiving housing for engaging the second face of the receiving member;

whereby the housing is mounted to the receiving member by the interaction of the lip and the protrusion.

Farnsworth does not show the shape of the protrusion to be parabolic. Bissinger shows a parabolic protrusion. At the time of the invention, one of ordinary skill in the art would have made the protrusion to be parabolic in shape for the following motivations:

- a) "...providing high retaining forces which can also be produced at relatively low cost economically" (Abstract).
- b) "...by this configuration the outer boundaries of the retaining projections are solid and are integrally connected to the material of the bushing without separation" column 1, lines 65+.
- c) "...so that an arched, knuckle-like shape is produced. The resultant shape produced by the forming means yields a retaining bushing characterized by **extremely high strength, dimensional stability** (*as stated in the previous Office Action*), and immunity to damage even when very thin sheet material is used to form the retaining bushing" column 2, lines 5+.
- d) "...there are no sharp edges or corners which may cause damage to the bearing particularly to the seating surfaces when assembled." column 2, lines 14+

- e) "...the retaining projections are designed in such a way that they slope down continuously in the axial direction, decreasing from the highest radial point above the lateral surface in the area of the stamping line until they reach the level of the lateral surface. By this arrangement, optimum support is provided for the retaining forces acting on the end surface of the stamped area. Accordingly, on insertion into a bearing bore, the backs of the retaining projections serve advantageously as a guide ramp" column 2, lines 26+

Farnsworth does not show the polymer and the coating of electrically conductive material.

Poplawski et al (Poplawski hereinafter) show a removable transceiver module and receptacle wherein a housing is made of polymer and is coated with an electrically conductive material. One of ordinary skill in the art would have further modified the housing of Farnsworth to be made of polymer material and coated with an electrically conductive material for the following motivations:

- a) "...provide a module with a coating which dissipates an electrostatic discharge and serves as an electromagnetic shield." column 2, lines 45+
- b) "...for preventing the escape of electromagnetic radiation from the receptacle." column 2, lines 52+.

- c) "...In a preferred embodiment, the potting box 64 is injection molded of a polymer material such as VALOX, STANYL, or any other glass-filled heat resistant material which can withstand solder reflow temperatures. In addition, it is preferred that the potting box 64 be either plated, wet plated, or vacuum metalaled with an aluminum or stainless steel coating in order to dissipate an electrostatic discharge and provide for electromagnetic shielding. As well, the transceiver connector 20 (FIG. 1) may be plated, wet plated, or vacuum metalized, in order to reduce emissions and enhance grounding of the module. Such metalization of the connector 20 can bring the module in compliance with FCC Rules, Part 15. In a preferred embodiment, the connector 20 is metalized separately from the potting box 64 so that each attachment portion is metalized and provides for conductivity between the parts. As the connector 20 will be attached to a chassis containing fiber optic connectors which are at ground potential, the connector will ground the metalized potting box 64 which is attached to a daughter board. Such grounding enhances the module's ability to dissipate electrostatic discharge and provide for electromagnetic shielding." column 6, lines 57.

With regards to claim 4, the protrusion and the lip define opposed surfaces.

As for claims 9, 15, and 19, the passage for receiving a connector is at an angle to an opening in the cavity.

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3. **Claims 6, 7, 11, 13, 14, 17, and 21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Farnsworth and Poplawski as applied to claims 5 and 12 above, and further in view of Beck et al (US 5,259,792) and Porter (US 5,808,866) and Brennan et al (4,516,825). Farnsworth, Benner and Poplawski do not expressly show the material of the housing being polycarbonate and the conductive material being chrome or copper-nickel. Beck et al show the conductive material to be copper-nickel and Porter shows the chrome. At the time of the invention, one of ordinary skill in the art would have used chrome or copper-nickel since both Beck and Porter show their use as coatings as conductive material for protection, and a skilled artisan would have used polycarbonate material since polycarbonate is a well know polymer, as Brennan et al shows, in order to save production costs over more expensive metal (Beck et al, column 3, lines 18-46).

Response to Arguments

Applicant's arguments with respect to claims 1 and 4-21 have been considered but are moot in view of the new ground(s) of rejection. However, for clarification on the grounds of rejection, the examiner was looking to Bessinger for the shape of the protrusion and Poplawski for the material of the housing. The parabolic shaped protrusion of Bessinger does not exclude the use of the polymer material of Poplawski nor does the use of polymer material exclude the use of the parabolic shaped protrusion. Nowhere does Farnsworth teach that no other shapes or materials can be used. Applicant argues that the protrusions can not be used with polymer materials citing "even when very thin sheet material is used" (bottom half of page 10), however, the examiner emphasizes Bissinger's use of the word "even." The use of the word "even"

suggest other materials and has an advantage that it also works with thin sheet material. The use of the word “even” does not mean “only” so it does not exclude other materials including polymers.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Hwa S. Lee whose telephone number is 571-272-2419. The examiner can normally be reached on Tue-Fr.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley Jr. can be reached on 571-272-2800 ext 77. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Andrew Hwa Lee', with a stylized, flowing script.

Andrew Hwa Lee
Primary Examiner
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